



MI FluFocus

Influenza Surveillance and Avian Influenza Update

Bureau of Epidemiology
Bureau of Laboratories

Michigan Department
of Community Health



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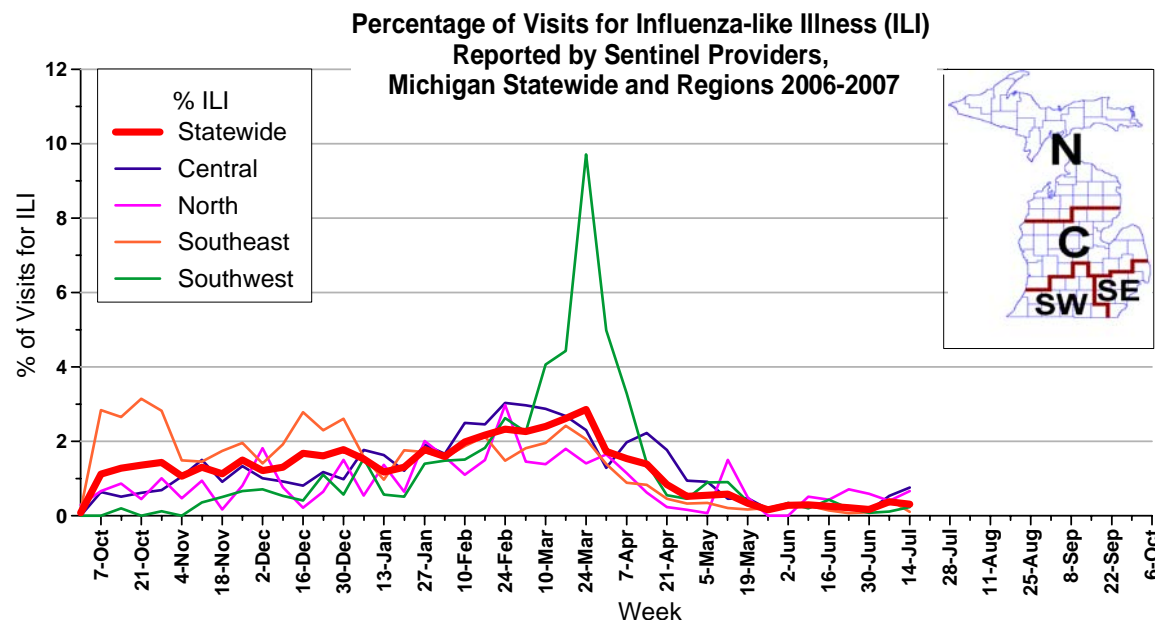
New updates in this issue:

- **Michigan Surveillance:** All surveillance indicators show little to no influenza or ILI activity.
- **Avian Influenza:** H5N1 avian influenza outbreak in poultry in Bangladesh.

Michigan Disease Surveillance System: Last week's reporting saw both aggregate flu-like illness reports and individual influenza reports holding steady near the previous week's levels. These indicators are expected to continue to fluctuate at baseline levels until fall.

Emergency Department Surveillance: Emergency department visits due to constitutional and respiratory complaints fluctuated slightly but remained steady overall this past week. Reported levels are consistent with levels from this time last year. Three constitutional alerts in Region 8 and two respiratory alerts in Regions 1(1) and 3(1) were generated last week.

Sentinel Surveillance (as of July 19): During the week ending July 14, 2007, the proportion of visits due to influenza-like illness (ILI) in Michigan remained at low a low level; 0.3% of all visits. This represents 11 cases of ILI out of 3495 total patient visits; fifteen sentinels provided data for this report. By surveillance region, the proportion of visits due to ILI was 0.8%, Central; 0.7%, North; 0.1%, Southeast; and 0.2%, Southwest. Note that these rates may change as additional reports are received.



As part of pandemic influenza preparedness, CDC and MDCH highly encourage and recommend year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Rachel Potter at 517-335-9710 or potterr1@michigan.gov for more information.

Laboratory Surveillance (as of July 19): For the 2006-2007 influenza season, there have been 158 culture-confirmed cases from the MDCH Lab:

- 69 A:H1N1 (Southeast (22), Southwest (21), Central (16), North (10))
- 1 A:H1, N pending (Southeast)
- 34 A:H3N2 (North (12), Southeast (12), Central (7), Southwest (3))
- 54 B (Southeast (18), Central (17), Southwest (12), North (7))

All influenza B cultures have been B/Malaysia, except for six B/Shanghai results from the Southeast region.

***As a reminder, the positive predictive value of influenza rapid tests decreases during times of low influenza prevalence. MDCH suggests that during periods of low influenza activity in your community, all positive rapid tests results be confirmed by sending in a specimen for viral culture; this can be arranged through your local health department.

Influenza-Associated Pediatric Mortality (as of July 19): For the 2006-2007 season, there are no confirmed reports of influenza-related pediatric mortality in Michigan. MDCH and CDC are currently investigating two possible influenza-associated pediatric mortalities from March, one in the Southwest region and one in the Southeast region.

***Reminder: The CDC has asked all states to continue to collect information on any pediatric death associated with influenza infection. This includes not only any death in a child less than 18 years of age resulting from a clinically compatible illness confirmed to be influenza by an appropriate laboratory or rapid diagnostic test, but also unexplained death with evidence of an infectious process in a child. Refer to http://www.michigan.gov/documents/fluletter_107562_7.pdf for the complete protocol. It is important to immediately call or fax information to MDCH to ensure that appropriate clinical specimens can be obtained.

Congregate Settings Outbreaks (as of July 19): There has been one report of an influenza A outbreak from a Central region extended care facility for the 2006-2007 influenza season.

National: For CDC weekly surveillance report archives, visit <http://www.cdc.gov/flu/weekly/fluactivity.htm>.

International (Fuji Radio, July 12): The Health Ministry has recorded over four thousand cases of flu like illness during the month of March. Dr Josaia Samuela says the flu endemic which is believed to have started in March is still around because of the cold weather. Samuela advises people to stay warm and drink a lot of fluids.

International (WHO, as of March 29): Overall influenza activity in the northern hemisphere remained moderate in weeks 8–11. In North America, influenza activity declined in general, while in Europe and some Asian countries and areas, widespread activity continued, with influenza A(H3N2) viruses predominating. Influenza A(H1N1) viruses circulated in the United States and in a few eastern European countries. Influenza B viruses circulated at low levels.

For influenza activity from individual countries, please visit the full WHO article "Seasonal Influenza Activity in the World, 2007" at <http://www.who.int/csr/disease/influenza/update/en/>.

Weekly reporting to the CDC has concluded for the 2006-2007 influenza season.

End of Seasonal Report

Avian Influenza Activity

WHO Pandemic Phase: Phase 3 - Human infection(s) with a new subtype, but no human-to-human spread or rare instances of spread to a close contact.

International, Human (Reuters AlertNet, July 14): An Indonesian child who died of bird flu last weekend [July 8] [see updated WHO report at http://www.who.int/csr/don/2007_07_11/en/index.html]

appears to have caught the virus from dead or sick chickens in the area carrying the disease, a Health Ministry official said on Saturday [July 14].

Contact with infected fowl is the most common way for humans to contract the H5N1 virus, but medical experts had initially struggled to pinpoint the source of the infection in this case. It is always a concern when the cause of a human infection cannot be traced as it makes infection control more difficult.

"She [previously reported as "he" by the Indonesian Health Ministry and the World Health Organization (WHO)] had indirect contact with dead chickens near her school," Joko Suyono, an official at the Ministry's bird flu centre, said by telephone. The victim, from the city of Cilegon in Banten province, had initially been identified as a 6-year-old boy, but Suyono said this was due to a mix up between the hospital where she was treated and a laboratory.

The official said that tests on dead chickens found near the girl's school showed they were infected with bird flu. "We cannot know whether she touched sick chickens or not because she died. But we know surrounding her school the virus is endemic (in fowl)," he added.

Suyono said tests for the virus on people who may have had contact with the girl had proved negative and also said the findings in this case ruled out the possibility of the virus being transmitted between humans. "So far, there have been no human-to-human cases in Indonesia," he said.

Bird flu is endemic in bird [poultry] populations in most parts of Indonesia, where millions of backyard chickens live in close proximity with humans. Indonesia has had 81 confirmed human deaths from bird flu, the most of any country in the world. According to WHO data, globally there have been 192 human deaths out of 318 cases of the disease.

International, Poultry (The Daily Star, July 13): Some 1500 domestic fowls were culled in the district town on Thursday night [July 12] following detection of avian influenza.

Two separate teams, led by a first class magistrate, searched local houses at Pramanikpara, Mandolpara, Mollapara and Shibpur areas from 8:00 PM to midnight and culled the birds, district Livestock office sources said.

Earlier, a sample of dead chicken was sent to Joypurhat Animal Disease Laboratory for a test that detected the virus. Later, the test result was sent to Bangladesh Livestock Research Institute at Savar in Dhaka for confirmation.

On Thursday, the deputy commissioner's office received a faxed message from the institute, which said that poultry birds and pigeons in the areas have been affected with bird flu.

International, Poultry (Prague Daily Monitor, July 13): Czech vets decided, after having consulted the European Commission and the Czech Agriculture Ministry, to liquidate healthy poultry at 3 chicken farms in the area where the emergence of the dangerous H5N1 bird flu virus strain was confirmed on Wed [July 11], Zbynek Semerad from the State Veterinary Administration told CTK today.

The poultry will be culled at 2 farms in the village of Loucky and at a farm in the village of Zarecka Lhota. In all, 68,000 birds will be culled though no virus has been discovered among them, Semerad said.

Approximately the same number of ill chickens has being liquidated since this morning by the firefighters and soldiers at the poultry farms in Kosorin and Netreby, east Bohemia, where the dangerous H5N1 strain has been detected.

According to the Czech Veterinary Administration, there is no danger of a bird flu epidemic in the Czech Republic.

The first case of bird flu this year was detected on 20 Jun 2007, at the Tisova farm, also east Bohemia. A week later, the H5N1 virus was detected at another poultry farm, four kilometres away from Tisova.

International, Wild Birds (European Union Health and Consumer Protection, July 13): The weekly publication "HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI) CASES IN WILD BIRDS IN 2007 NOTIFIED BY MEMBER STATES TO THE ANIMAL DISEASE NOTIFICATION SYSTEM (ADNS), updated 12 Jul 2007, includes the following data:

Total number of wild birds found positive as of 12 Jul 2007: 41

Number of cases per bird species: 19 swans, 19 grebes, 2 geese, 1 duck.

Number of cases per country: Germany 37, France 3, Czech Republic 1.

Michigan Wild Bird Surveillance (USDA, July 19): For the 2007 testing season, 126 Michigan samples have been taken so far, comprised of 98 live bird samples and 28 morbidity/mortality samples.

According to the National HPAI Early Detection Data System website, HPAI subtype H5N1 has not been recovered from any Michigan samples tested to date, or from the 2819 birds or environmental samples tested nationwide. The 2007 testing season will run from April 1, 2007-March 31, 2008. For more information, visit the National HPAI Early Detection Data System website at <http://wildlifedisease.nhii.gov/ai/>.

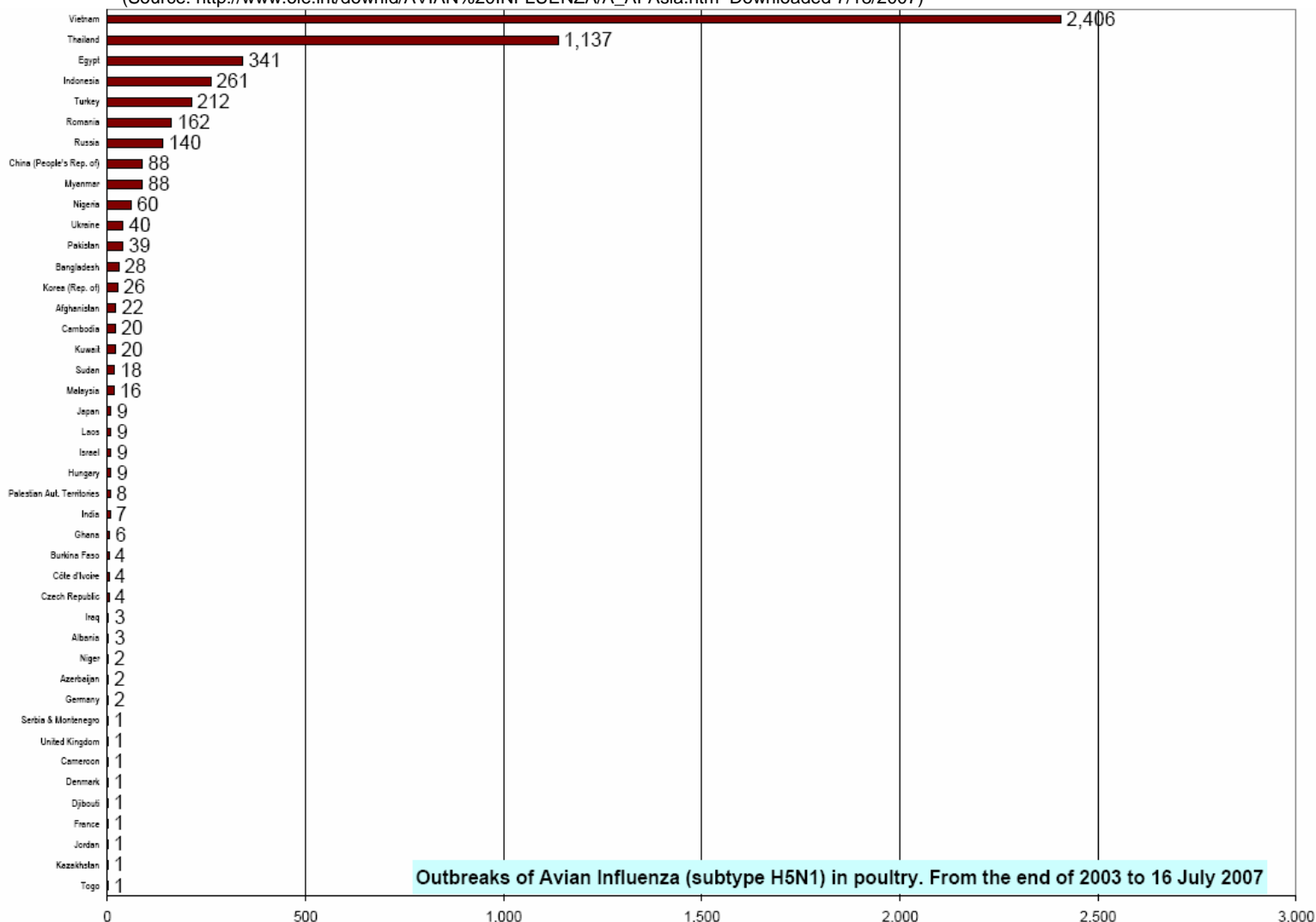
To learn about avian influenza surveillance in Michigan wild birds or to report dead waterfowl, go to Michigan's Emerging Disease website at <http://www.michigan.gov/emergingdiseases>.

Please contact Susan Vagasky at VagaskyS@Michigan.gov with any questions regarding this newsletter or to be added to the weekly electronic mailing list.

Contributors

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Table 1. H5N1 Influenza in Poultry (Outbreaks up to July 16, 2007)(Source: http://www.oie.int/download/AVIAN%20INFLUENZA/A_AI-Asia.htm Downloaded 7/18/2007)**Table 2. H5N1 Influenza in Humans (Cases up to July 11, 2007)**

(http://www.who.int/entity/csr/disease/avian_influenza/country/cases_table_2007_07_11/en/index.html Downloaded 7/11/2007)

Cumulative number of lab-confirmed human cases reported to WHO. Total number of cases includes deaths.

| Country | 2003 | | 2004 | | 2005 | | 2006 | | 2007 | | Total | |
|------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| | cases | deaths | cases | deaths | cases | deaths | cases | deaths | cases | deaths | cases | deaths |
| Azerbaijan | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 0 | 0 | 8 | 5 |
| Cambodia | 0 | 0 | 0 | 0 | 4 | 4 | 2 | 2 | 1 | 1 | 7 | 7 |
| China | 1 | 1 | 0 | 0 | 8 | 5 | 13 | 8 | 3 | 2 | 25 | 16 |
| Djibouti | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 10 | 19 | 5 | 37 | 15 |
| Indonesia | 0 | 0 | 0 | 0 | 20 | 13 | 55 | 45 | 27 | 23 | 102 | 81 |
| Iraq | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 3 | 2 |
| Lao PDR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 |
| Nigeria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| Thailand | 0 | 0 | 17 | 12 | 5 | 2 | 3 | 3 | 0 | 0 | 25 | 17 |
| Turkey | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 4 | 0 | 0 | 12 | 4 |
| Viet Nam | 3 | 3 | 29 | 20 | 61 | 19 | 0 | 0 | 2 | 0 | 95 | 42 |
| Total | 4 | 4 | 46 | 32 | 98 | 43 | 115 | 79 | 54 | 33 | 318 | 192 |